



## M01 - VERSASENSE EDGE GATEWAY (SmartMesh IP)

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### PRODUCT DESCRIPTION

The VersaSense IoT Fabric provides a simple, reliable and affordable Industrial Internet of Things (IIoT) solution for wireless sensing and control.

The VersaSense Edge Gateway controls a network of VersaSense Wireless Devices. The gateway provides coordination, connectivity and an interface to the VersaSense network.

**Coordination:** the gateway configures and manages messaging, routing and software upgrades for the VersaSense network.

**Connectivity:** the gateway provides Ethernet and WiFi connectivity to the IoT network. REST and web sockets APIs provide access to, and control of the VersaSense devices.

**Interface:** the edge gateway provides a simple web interface that supports network health monitoring, sensor data visualization and secure device commissioning.

The VersaSense software stack automatically installs and configures all drivers, eliminating the cost and complexity of deploying an IoT network.

### NETWORK TECHNOLOGY

The VersaSense Edge Gateway is designed for challenging environments such as factories, distribution facilities and data centers.

The M01 version of the VersaSense Edge Gateway uses SmartMesh IP™ from Linear Technology® to provide a self-healing mesh

network that delivers battery life of up to 10 years, 99.999% reliability and accurate time-stamping.

The VersaSense Edge Gateway using SmartMesh IP coordinates a network of up to 100 VersaSense Wireless Devices (**Pxx**). Each wireless device acts as a repeater or 'router' with an approximate indoor range of 50M. This allows a single mesh network to cover very large areas, such as entire factories, office buildings, ships or trains.

### APPLICATION FEATURES

- ★ Intel® Edison module
- ★ 500MHz Intel Atom™ Processor
- ★ 1GB RAM, 4GB Flash
- ★ USB 2.0 and MicroSD card sockets
- ★ Easy to use web interface
- ★ REST, Websockets and IETF CoAP / IPSO APIs
- ★ Secure firmware updates

### NETWORK FEATURES

- ★ 6LoWPAN (802.15.4e) using SmartMesh IP LTC5800<sup>1</sup> for low power, high reliability IoT networking
- ★ a/b/g/n WiFi
- ★ 100Mbps Ethernet

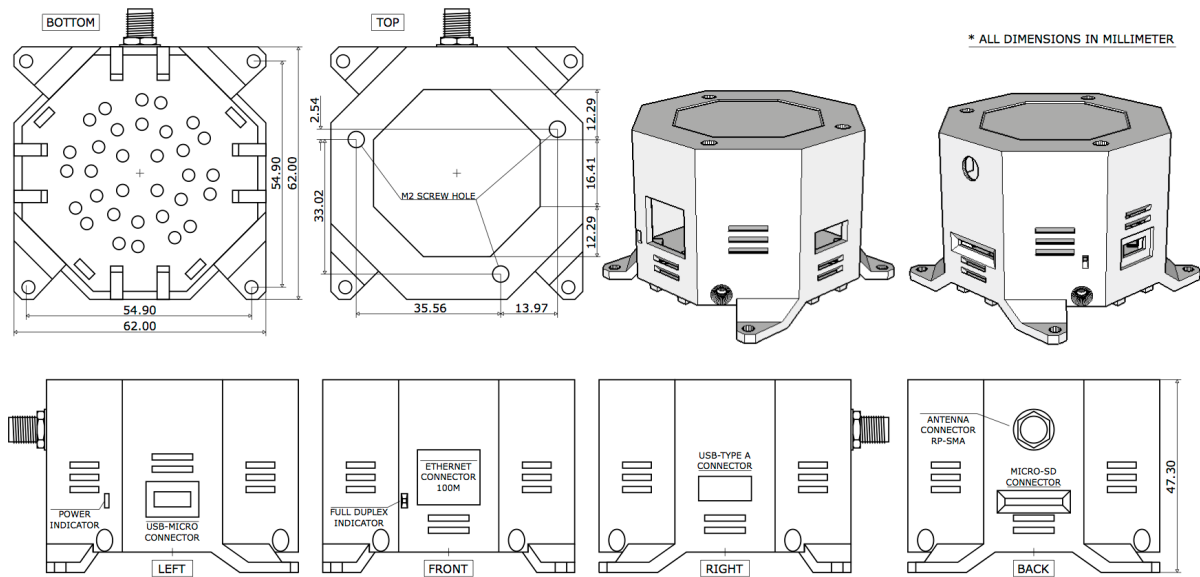
### POWER FEATURES

- ★ External MicroUSB power supply
- ★ Max 1A DC current draw
- ★ Battery backed real-time clock

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<sup>1</sup> [LTC5800.pdf](#)

## MECHANICAL SPECIFICATIONS



Case construction material.....	Polyamide <sup>2</sup>
Antenna connector.....	R-SMA
Peripheral connectors.....	USB 2.0

### DEVICE CHARACTERISTICS:

Supply voltage range.....	4.75V to 5.25V
Maximum DC current (via MicroUSB port).....	<= 1A
Temperature range.....	0°C to 40°C
Maximum humidity.....	75% RH

### PRODUCT INFORMATION:

Product brochure:	<a href="#">VersaSense-Brochure.pdf</a>
Product catalog:	<a href="#">VersaSense-Catalog.pdf</a>
Documentation:	<a href="#">General documentation and software development APIs</a>

### CONTACT INFORMATION:

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<sup>2</sup> <https://i.materialise.com/3d-printing-materials/polyamide/technical-specifications>